



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,298	03/27/2001	Ruth D. Kreichauf	1004.1136102	8636

128 7590 07/29/2004

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/822,298	Applicant(s) KREICHAUF, RUTH D.	
	Examiner MONZER R CHORBAJI	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 32-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 32-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This final office action is in response to the amendment received on 05/17/2004

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 32, 36 and 44-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoag (No Such Thing As Doomsday).

With respect to claims 1, 32, 36 and 44-46, Hoag discloses a building (shelter building is equivalent to the feature building in the instant claims used to provide a human life sustaining atmosphere in case of a chemical or biological attack) with multiple rooms (page 13, under the subtitle “start decontamination as soon as possible”, lines 2-4 or page 15, under the subtitle “decontamination room”, lines 1-5) having air ducts (page 5, subtitle “air intake and exhaust ducts, and an HVAC system (page 4, under the subtitle “air conditioning, lines 9-16). So, within this building there is a minimum of at least one room having air ducts accommodating the building air supply and return ducts. Also, Hoag teaches that in case of biological or chemical attack the building shelter has to be sealed from the outside air (page 6, under the subtitle “sealed seal atmosphere” and page 8, under the subtitle “blast valves and gate valves”. As a result, the air ducts of at least one room are sealed from the outside air depending if the shelter is one room shelter building or multiple room shelter building. Under the subtitle

Art Unit: 1744

"decontamination room", Hoag teaches that shelters can be big or small in size. For example, a one room shelter building with walls such that the outside structure is considered as the building and the inside structure is considered as the room. Thus, the room within the shelter building is sealed from the outside environment using gate valves as taught by Hoag. In addition, Hoag teaches the use of oxygen generator/carbon dioxide scrubbing device connected to the rooms (page 6, under the subtitle "sealed shelter atmosphere").

With respect to claims 2, 5, 42, 44 and 46-47, Hoag discloses the use of a device to generate gaseous oxygen (page 6, under the subtitle "sealed shelter atmosphere"), means for sealing off the room (page 6, under the subtitle "sealed seal atmosphere", the use of carbon filters (page 8, subtitle "carbon filters") and page 8, under the subtitle "blast valves and gate valves") from the building air ducts and a chemical oxygen source (page 6, under the subtitle "air intake and exhaust ducts, lines 19-20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 3-4 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoag (No Such Thing As Doomsday) in view of Mulcahy (U.S.P.N. 4,901,715).

Hoag fails to disclose an oxygen generator that includes an exhaust tube, which has a terminal free end outside of the room or a plumbing fixture having a water trap. However, Mulcahy discloses an apparatus for establishing gaseous communication between a room of a building, wherein the room contains a toilet bowl, and a building conduit disposed within the building. The building conduit is in gaseous communication with the atmospheric gases outside of the building. The toilet bowl has a water level forming a water trap and the toilet bowl includes a flexible water-impermeable, tubular member inserted completely through the water trap so that a first end of the flexible tubular member is disposed on a building conduit side of the water trap and a second end of the flexible tubular member is disposed on a room side of the water trap (see figures and co.2, lines 38, col.3, line 26). Additionally, it is shown in figure 5 that the user end of the apparatus inside the room may be a breathing mask (94). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hoag and add a plumbing fixture having a water trap and exhaust tube as taught by Mulcahy in order to exhaust the unused oxygen from the user's atmosphere.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoag (No Such Thing As Doomsday) in view of the applicant's admitted state of the prior art.

Hoag does not disclose that the chemical source includes a chemical compound, which generates oxygen in the presence of water. Also, Hoag does not disclose a chemical air revitalization compound such as potassium superperoxide. However, the applicant discloses on page 8, lines 6-16, that water based chemical generators for generating oxygen are well known to those skilled in the art. Further, the applicant discloses on page 10, lines 18-22, that it is well known to use air revitalization compound such as potassium superperoxide in order to remove carbon dioxide and generate oxygen. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hoag and replace the oxygen generator with a functionally equivalent oxygen source such as a chemical oxygen source or an air revitalization compound, which are admitted by the applicant as being well known to those skilled in the art.

7. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoag (No Such Thing As Doomsday) in view of the applicant's admitted state of the prior art.

Hoag does not teach an air revitalizing device such as potassium superoxide. The applicant discloses on page 10, lines 18-22, that it is well known to use an air revitalization compound such as potassium superoxide in order to remove carbon dioxide and generate oxygen. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hoag and replace oxygen means source and carbon dioxide scrubber with a functionally

Art Unit: 1744

equivalent air revitalization compound that both removes carbon dioxide and generates oxygen as admitted by the applicant as being well known.

8. Claims 2-4, 33-35 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoag (No Such Thing As Doomsday) in view of the applicant's admitted state of the prior art.

Hoag does not disclose an air revitalizing device, which includes an oxygen generator that electrolyzes water, an exhaust tube for discharging waste gas from the oxygen generator, a plumbing fixture having a water trap, a carbon dioxide filter, or a carbon dioxide converter. The applicant has disclosed, on pages 7-11, that the limitations of claims 2-4, 33-35 and 39-43 are well in the art. They are functionally equivalent alternatives, which are known to generate oxygen and remove carbon dioxide from an atmosphere. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hoag and substitute the oxygen source and carbon dioxide scrubber with any known functionally equivalent means of generating oxygen and removing carbon dioxide such as those disclosed by the applicant as being well known in the art.

Response to Arguments

9. Applicant's arguments with respect to claim 1-8 and 32-47 have been considered but are moot in view of the new ground(s) of rejection.

The Hoag reference is applied to show that the air ducts leading to outlets in a room within a building can be sealed using gate valves from in case of a biological or chemical attack. The Hoag reference also discloses a building (shelter building is

Art Unit: 1744

equivalent to the feature building in the instant claims used to provide a human life sustaining atmosphere in case of a chemical or biological attack) with multiple rooms (page 13, under the subtitle "start decontamination as soon as possible", lines 2-4 or page 15, under the subtitle "decontamination room", lines 1-5) having air ducts (page 5, subtitle "air intake and exhaust ducts, and an HVAC system (page 4, under the subtitle "air conditioning, lines 9-16).

In addition, it would be credible to believe that the building of Hoag to include a toilet since the building is designed as living quarters during chemical or biological attack where occupants cannot leave such a building.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1744

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 8:30-5:00.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji *MRC*
Patent Examiner
AU 1744
07/23/2004

Robert J. Warden, Sr.
ROBERT J. WARDEN, SR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700